

CLAIMS

1. A method of dewatering a pipeline between two subsea manifolds using a source of compressed gas at one of said manifolds having a subsea pig launcher/receiver with a pig therein comprising:

connecting a line from said compressed gas source to said pig launcher/receiver for flow of compressed gas to force said pig to said other manifold; and

connecting a dewatering pump which is subsea near said other manifold to draw water from said pipeline and move said pig and compressed gas through the pipeline to said manifold.

- 2 A method according to claim 1 wherein said connecting of said line and said vacuum pump is done with a robotic arm mounted on a SV.

3. A method according to claim 1 wherein said dewatering pump is carried by said SV

4. A method of dewatering a pipeline between two subsea manifolds using a compressed gas pack connected to one of said manifolds having a subsea pig launcher/receiver with a pig therein comprising:

drawing water, said pig and compressed gas through said pipeline with a subsea pump at said other manifold.

5. A method according to claim 4 wherein said pump is carried by a SV.
6. A method according to claim 5 wherein said SV is tethered to a support vessel on the surface.
7. A method of cleaning and/or hydrostatic testing a pipeline between two subsea manifolds, one of said manifolds having a subsea pig launcher/receiver with a pig and the other having a subsea pig receiver comprising:
 - using a SV to operate pumps on a fill and test package to force seawater behind said pig and move the pig from the pig launcher/receiver to the pig receiver; and
 - pumping more water into said pipeline to a test pressure and maintaining said pressure to assure that there are no leaks in said pipeline.
8. A method according to claim 7 wherein the test pressure is read on a gauge mounted on a panel on said pig launcher/receiver.
9. A method according to claim 8 wherein said fill and test package is carried by said SV.
10. A method for commissioning a subsea pipeline while both ends are on the subsea floor between two subsea manifolds, one of said manifolds having a subsea pig

launcher/receiver with a pig and the other having a subsea pig receiver comprising:

using a SV, operating pumps on a fill and test package to force seawater behind said pig and move the pig from the pig launcher/receiver to the pig receiver;

pumping more water into said pipeline to a test pressure and maintaining said pressure to assure that there are no leaks in said pipeline;

using a SV, connecting a line from a compressed gas pack to said pig launcher/receiver for flow of compressed gas to force said pig to said pig launcher/receiver; and

pumping using a dewatering pump to suck water from said pipeline and moving said pig and compressed gas through the pipeline to said pig launcher/receiver.

11. A method according to claim 10 wherein said SV has a robotic arm for connecting and disconnecting pumps to said pipeline.

12. A method for the hydrostatic testing of a pipeline before its ends are connected wherein both ends are on the seafloor and having a pig launcher/receiver at both ends of said pipeline; comprising:

using at least one subsea water pump to propel at least one pig down the line and to raise the internal pressure of the pipeline sufficiently for hydrostatic testing of the pipeline.

13. A method for dewatering a pipeline before its ends are connected, wherein both ends are on the seafloor, and having a pig launcher/receiver at both ends of said pipeline comprising:

using at least one subsea water pump to pump the water from the pipeline while injecting sufficient compressed gas to propel drying pigs down the pipeline.